Amendments to the Specification:

Please replace paragraph [0065] with the following rewritten paragraph:

[0065] The present invention provides for the first time a nucleic acid encoding PfKinI-1. This protein is a member of the kinesin superfamily of motor proteins. More specifically, PfKinI-1 shares approximately 50% identity to a fragment of HsKinI-3 (also known as AL363552). See, ~~PCT Appln No. _____ (Attorney Docket No. 1032.1PCT),~~ PCT Application No. 01/30750 (PCT publication WO 02/26929), which is incorporated herein by reference.

Please replace paragraph [0074] with the following rewritten paragraph:

[0074] ~~Some portions or fragments of PfKinI-1 include at least 7, 10, 15, 20, 35, 50, 100, 250, 300, 350, 500, or 1000 contiguous amino acids from the sequence shown in Fig.2. Some fragments contain fewer than 1000, 500, 250, 100, or 50 contiguous amino acids from the sequence shown in Fig. 2. For example, exemplary~~ Exemplary fragments include fragments having 15-50 amino acids or 100-500 amino acids. ~~Some fragments include a motor domain. The motor domain runs from about amino acid 4 to about amino acid 401 of SEQ ID NO:1. Such fragments typically include this span, or an active portion thereof.~~ Some fragments include a ligand binding domain of PfKinI-1. Nucleic acids encoding such fragments are also included in the invention.

Please replace paragraph [00189] with the following rewritten paragraph:

[00189] For the microtubule depolymerization assay, 100 µl reaction mixes containing the PfKinI-1 construct, taxol stabilized microtubules and adenine nucleotide were assembled ~~according to the table below~~. ATP, ADP, AMPPNP and Apyrase (for no nucleotide-free state) were the typical nucleotide conditions tested in this assay. Two control mixes were routinely included from which KinI-1 or microtubules were omitted. Samples were incubated at room

temperature for 15min. Following the incubation, samples were centrifuged at 100000g for 10 min. Supernatants were aspirated away from the microtubule pellets and mixed with an equal volume of 2x ~~SDSPAGE~~ SDS PAGE loading dye. Pellets were resuspended in a volume of 1x loading dye equivalent to 2x starting volume of the sample before spin. Both supernatant and pellet samples were loaded on an SDS PAGE gel, run and stained with Coomassie Blue according to standard procedures. Appearance of tubulin (about 50 kDa) in the lanes containing the supernatant was interpreted as a sign of microtubule depolymerization.